

PROPOSED OPERATING CRITERIA FOR THE DUAL CONVEYANCE ALTERNATIVES

INTRODUCTION

The proposed operating criteria are intended to provide a level of protection greater than is provided by the Delta Outflow/X2 and other requirements in the 1995 Water Quality Control Plan (WQCP). Isolated conveyance would not be subject to April/May pulse flow period export restrictions. Inflow/export ratios would remain as described in the 1995 WQCP in November through January and in July for water exported using in-Delta facilities and for water diverted to in-Delta storage. Ratios would be decreased by 50 percent in February through June for in-Delta diversions. In August through October ratios could be increased by 10% for water conveyed through the isolated facility. In all other months the 1995 WQCP ratios would apply to any isolated facility. During the months of April through September, a minimum of 20% of the diversions will be through in-Delta facilities and channels.

The following suggestions do not necessarily represent the Department's position on how dual conveyance alternatives should be operated. The concepts underlying this alternative should lead to narrowing alternatives and defining impacts of alternatives in the programmatic EIR/EIS. We expect these concepts to lead considerable discussions among participating interests.

DUAL CONVEYANCE FACILITY OPERATION CRITERIA

Facility	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	August	September
10,000 cfs isolated screened conveyance facility at Hood	X	X	X	X	X	XM	XM	XM	XM	XM	X	X
Releases (up to 3,000 to 5,000 cfs) from screened isolated conveyance into the Mokelumne River in the North Delta	No	No	No	No	No	No	XM	XM	XM	XM	XM	No
Direct delivery of supplies (500 cfs) to farm land in the:												
North Delta	X	X	No	No	No	No	No	No	No	No	No	X
South Delta	X	X	No	No	No	No	X	X	X	X	X	X

Facility	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	August	September
Delta Cross Channel	closed	closed	closed	closed	closed	closed	closed	closed	closed	open	open	open
Screened intake from Italian Slough (up to 2,000 cfs)	X	X	X	No	No	No	XM	XM	XM	XM	X	X
Tracy pumping plant with upgraded screen and fish facility (limited to 4,600 cfs instantaneous maximum)	X	X	XM	XM	No	No	XM	XM	XM	XM	X	X
In-Delta storage (200 TAF) ^{1/} environ. water export water	F F/R	F F/R	FM FM/R	FM FM	R No	R No	R No	R No	R No	R No	F/R F/R	F/R F/R

X = Full operation subject to general operation measures

No = Operation not allowed

M = Use of real-time monitoring could be used to improve conditions for aquatic resources, e.g. use real-time monitoring to identify pulses of striped eggs and larvae or presence of delta smelt larvae near diversion intakes. Monitoring should include observing adult salmon presence.

F = Filling allowed subject to general operation measures

R = Releases subject to general operation measures

R/E = Releases made are at least in part for the environment and are based on general operations measures

^{1/} = Releases may be made from in-Delta Storage during any month provided there is a direct hydraulic connection to either the SWP or CVP export facility.

Additional Operation Measures

The following additional operation measures should be modeled:

1. Delay diverting water to storage or export in the period October through November in any water year until X2 is located at or downstream of river kilometer 74 (Chippis Island). After that condition is met, diversions will be limited to a maximum of 6,000 cfs combined diversions for five consecutive days. In the period December through May of any water year diversions to in-Delta storage or export will not begin until X2 has been located at or downstream of river kilometer 74 (Chippis Island) for ten consecutive days. After that ten days, diversions will be limited to a maximum of 6,000 cfs combined diversions for an additional five consecutive days.
2. Once the provisions outlined in measure 1 above are achieved the following operational conditions apply:

Diversions to in-Delta storage or export using Delta channels for conveyance in the October to December period would only occur when X2 is located at or downstream of river kilometer 81 (Collinsville).

Exports using Delta channels for conveyance in the January through July period would only occur when X2 is located at or downstream of river kilometer 77.

Diversions to in-Delta storage or export in the January through July period should occur so that, except when X2 is located west of river kilometer 56 (Benicia), upstream shifts of X2 attributable to those diversions are < 2.5 km.
3. Diversion to in-Delta storage would not occur from February 1 through July 31 in any water year.
4. Exports using Delta channels for conveyance would not occur during February or March in any water year.

5. Diversions to in-Delta storage will be limited so that, on a daily basis, diversions do not exceed either of the values in the following table:

Month	Percent of Previous Day's Delta Outflow ^{1/}	Percent of Previous Day's San Joaquin River Inflow Measured at Vernalis
October	40 %	175 %
November	35 %	150 %
December	25 %	125 %
January	10 %	75 %
February - July ^{2/}	0 %	0 %
August	30 %	150 %
September	40 %	175 %

1/- Delta outflow is assumed to be without diversions, therefore, it is calculated by using the previous day's Delta Outflow added to the previous day's diversions.

2/- No diversions to in-Delta storage would occur during February through July.

6. A percentage of in-Delta, upstream-of-Delta, and downstream-of-Delta storage shall be dedicated to the environment according to the following table. This "Environmental Water" is to be classified as "not available" for export or redirection:

Month	Percent of Diversions Dedicated to Environmental Uses ^{1/}
October	10 %
November	15 %
December	20 %
January	20 %
February ^{2/}	25 %
March ^{2/}	30 %
April ^{2/}	30 %
May ^{2/}	25 %
June ^{2/}	20 %
July ^{2/}	15 %
August	10 %
September	10 %

1/- The percentage shown will be retained and released at the discretion of the fish and wildlife agencies to improve ecosystem processes and functions and shall not be available for export by the SWP or CVP.

2/- No diversions to in-Delta storage would occur during February through July.

7. During November through January, when the Delta Cross Channel Gates are closed, diversion rates associated with filling in-Delta storage or exports using existing Delta channels shall be restricted to a maximum of 4,000 cfs combined diversions.
8. During April through June, discharges from in-Delta storage that are destined for export or redirection shall be limited to one-half of San Joaquin River Inflow measured at Vernalis.
9. Discharge for export from in-Delta storage will not allowed during the pulse flow period when flows in Middle and Old rivers are positive to the north or when combined SWP and CVP exports are less than flows in Old River downstream from the head of Old River.
10. Diversions for storage upstream of the Delta shall not occur during the April through May period unless resulting average flows measured in the Sacramento River are $\geq 25,000$ cfs.
11. Reservoirs shall be operated so that average daily flows measured at I Street during the period February through July are $\geq 13,000$ cfs.
12. Other assumptions used previously which preserve the flood peaks and associated flow related ecological processes and begin diversion to upstream storage on the descending leg of the hydrograph would be included.

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